

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026520**Date Inspected:** 14-Oct-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Fred Von Hoff and Salvador Merino			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	SAS Tower		

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 12E/13E edge plate 'F' outside, QA randomly observed ABF/JV qualified welder Jorge Lopez continuing to perform fill pass welding on the Complete Joint Penetration (CJP) splice butt joint. The welder was observed manually welding in the 3G (vertical) position utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16" diameter wire electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3040B-3. The joint being welded has a single V-groove butt joint with steel backing bar. ABF Quality Control (QC) Fred Von Hoff was noted monitoring the welding parameters of the welder. QA randomly monitored the welding parameter with readings of 240 amperes, 24.5 volts and 170mm per minute with calculated heat input of 2.08 Kjoules per mm. travel speed which appears in conformance to the contract requirements. During the shift, FCAW fill pass welding was still continuing when the job was turned over to fellow QA William Clifford due to another job assignment at Pier 7.

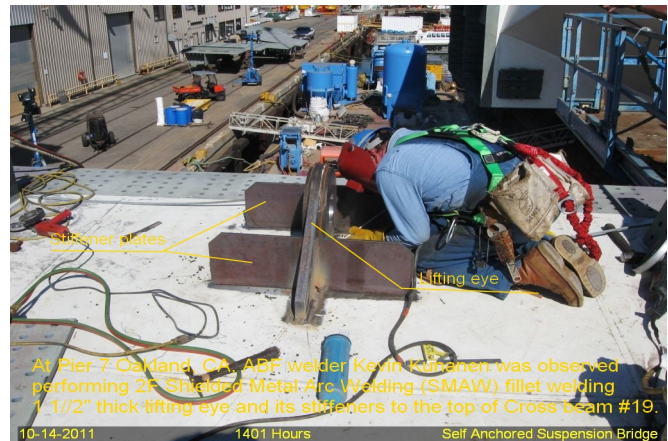
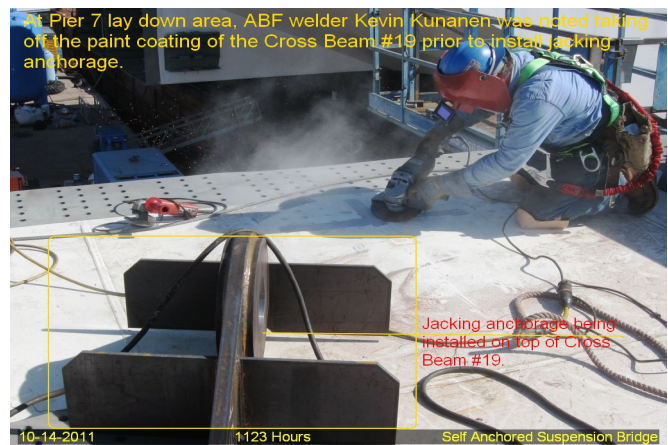
At Pier 7 Oakland, CA, this QA randomly observed ABF/JV qualified welder Kevin Kunanen ID #6521 perform 2F fillet welding between the Seismic Performance Critical Members (SPCM) top of Cross Beam #19 to 1 1/2" thick lifting eye and its four (4) stiffener plates. The welder was noted using Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A. ABF QC Salvador Merino was noted monitoring the welder's welding during welding. Prior welding, the welder was noted grinding off the paint coating where the lifting eye

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will be installed. The welder used the acetylene gas torch to preheat the lifting eye and the cross beam base plate to the required temperature of more than 150°F. This QA measured the welding parameter during welding and was noted 185 amps on the 5/32" diameter E7018H4R electrode and verified the preheat using the Fluke Infra Red Thermometer. Welding parameters noted appear in compliance to the contract requirements. At the end of the shift, fillet welding of 5/16" all around the lifting eye and its four (4) stiffener plates was completed but was not able to clean the welds due to limited time. QA was then informed by ABF QC Salvador Merino that the Visual Test (VT) and the Magnetic Particle Inspection (MT) to the welded 5/16" fillet weld will be done tomorrow.

This QA Inspector verbally informed QA SPCM Lead Inspector, Daniel Reyes, of the issues noted in this report for compliance therefore for further details of issues of significance see QA SPCM Lead Inspector, Daniel Reyes, Daily Inspection Report (6031) for this date.



Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

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Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer